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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/050,273 | 01/16/2002 | Nandagopal Mysore Jayaram | | 7036 |

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| EXAMINER |
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ORTIZ, BELIX M

| ART UNIT | PAPER NUMBER |
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2164

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/050,273

Applicant(s)

JAYARAM ET AL.

Examiner

Belix M. Ortiz

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>9/20/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Remarks

1. In response to communications files on 20-September-2004, claims 1-2, 4-8, and 10-13 are amended per applicant's request. Therefore, claims 1-14 are presently pending in the application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Abrams (U.S. patent 6,151,608).

As to claim 1, Abrams teaches a computer system for migrating a source database to a target database (see abstract and column 1, lines 5-7) comprising:

-a set of mapping instructions (see column 1, lines 29-32; column 4, lines 31-37; column 6, lines 6-11; and column 7, lines 35-37);

-a target schema specification (see column 7, lines 25-26); and

-a generically coded database conversion engine wherein the database conversion engine is coded to perform conversions independent of the specific type of source database and the specific type of target database associated with a conversion (see

column 1, lines 29-32; column 1, lines 39-45; column 5, lines 42-46; and column 17, lines 8-16);

wherein:

- data in the source database is sent to the database conversion engine (see figure 4);
- the target schema specification defines the target database (see column 5, lines 46-58);
- the set of mapping instructions defines at least one translation instruction for the translation of the source data from the source database to the target database (see column 7, lines 35-37);
- the database conversion engine receives the source data, the set of mapping instructions and the target schema specification (see figure 3);
- the database conversion engine parses the set of mapping instructions and the target schema specification (see figure 4);
- the database conversion engine performs the set of mapping instructions on the source data (see column 6, lines 6-11); and
- the database conversion engine uploads a resulting set of data into the target database in accordance with the target schema specification (see column 9, lines 27-30).

As to claim 2, Abrams teaches a computer system for migrating a source database to a target database (see abstract and column 1, lines 5-7) further comprising:

- a delimited source file associated with the source database (see column 6, lines 6-11);

- a mapping language (see column 2, lines 33-36);

wherein:

- a set of data in the delimited source file is sent to a database conversion engine (see column 6, lines 6-11);

- a set of mapping instructions is developed from the mapping language wherein the set of mapping instructions defines at least one translation instruction for the translation of the source data from the source database to the target database (see column 1, lines 28-31).

As to claim 3, Abrams teaches wherein the database conversion engine validates the source data and the database conversion engine validates the resulting set of data in accordance with the target schema specification (validated resulting set of data) (see column 5, lines 30-38).

As to claim 4, Abrams teaches a computer system for migrating a source database to a target database (see abstract and column 1, lines 5-7) further comprising:

- a set of mapping instructions (see column 1, lines 29-32; column 4, lines 31-37; column 6, lines 6-11; and column 7, lines 35-37);

wherein:

-a set of mapping instructions is developed from the mapping language via an interface wherein the set of mapping instructions defines at least one translation instruction for the translation of the source data from the source database to the target database (see column 1, lines 28-31).

As to claim 5, Abrams teaches a computer system for migrating a source database to a target database (see abstract and column 1, lines 5-7) further comprising:

- a set of mapping instructions (see column 1, lines 29-32; column 4, lines 31-37; column 6, lines 6-11; and column 7, lines 35-37);

wherein:

-a set of mapping instructions is developed from the extensible mapping language via an interface wherein the set of mapping instructions defines at least one translation instruction for the translation of the formatted source data from the source database to the target database (see column 1, lines 28-31).

As to claim 6, Abrams teaches a computer system for migrating a source database to a target database (see abstract and column 1, lines 5-7) further comprising:

- an industry-specific mapping instructions template (see column 18, lines 42-44);

wherein:

- a set of mapping instructions is developed from the industry-specific mapping instruction template and is further configured using the mapping language via a graphical user interface wherein the set of mapping

instructions defines at least one translation instruction for the translation of the formatted source data from the source database to the target database (see column 18, lines 42-56).

As to claim 7, Abrams teaches a computer system for migrating a source database to a target database (see abstract and column 1, lines 5-7) further comprising:

- a telecommunications-specific mapping instructions template (see column 2, lines 27-33).

wherein:

- a set of mapping instructions is developed from the telecommunications-specific mapping instruction template and is further configured using the mapping language via a graphical user interface wherein the set of mapping instructions defines at least one translation instruction for the translation of the formatted source data from the source database to the target database (see column 4, lines 24-31).

As to claim 8, Abrams teaches a computer system for migrating a source database to a target database (see abstract and column 1, lines 5-7) further comprising:

- a billing-specific mapping instructions template (see column 14, lines 35-40);

wherein:

- a set of mapping instructions is developed from the billing-specific mapping instruction template and is further configured using the mapping language via a graphical user interface wherein the set of mapping instructions defines at least one translation

instruction for the translation of the formatted source data from the source database to the target database (see column 4, lines 24-31).

As to claim 9, Abrams teaches wherein the database conversion engine parses the set of mapping instructions and concurrently performs the set of mapping instructions on the formatted source data to produce a resulting set of data (see figure 4; column 7, lines 35-37).

As to claim 10, Abrams teaches a computer system for migrating a source database to a target database (see abstract and column 1, lines 5-7) further comprising:

- a source extract format specification (see column 1, lines 19-22);

wherein:

- a basic business object is derived from the source database and the target database (see column 8, lines 41-43);

- the source extract format specification and the target schema specification are configured according to the basic business object (see column 8, lines 41-43);

- data in the source database is formatted according to the source extract format specification to produce a file with repetitive instances of the basic business object (formatted source data) (see column 5, lines 59-63);

- the database conversion engine parses the set of mapping instructions and concurrently performs the set of mapping instructions on the formatted

source data and uploads a resulting set of data into the target database (see column 9, lines 27-30).

As to claim 11, Abrams teaches a computer system for migrating a source database to a target database (see abstract and column 1, lines 5-7) comprising:

- a set of mapping instructions (see column 1, lines 29-32; column 4, lines 31-37; column 6, lines 6-11; and column 7, lines 35-37);
- a source extract format specification (see column 1, lines 19-22);
- a target schema specification (see column 7, lines 25-26); and
- a generically coded database conversion engine wherein the database conversion engine is coded to perform conversions independent of the specific type of source database and the specific type of target database associated with a conversion (see column 1, lines 29-32; column 1, lines 39-45; column 5, lines 42-46; and column 17, lines 8-16);

wherein:

- a basic business object is derived by analyzing information to be transferred from the source database to the target database (see column 7, lines 33-34);
- the source extract format specification and the target schema specification are configured according to the basic business object (see column 8, lines 41-43);
- data in the source database is sent to the database conversion engine (see figure 4);

- the target schema specification defines the target database (see column 5, lines 46-58);
- the set of mapping instructions defines at least one translation instruction for the translation of the source data from the source database to the target database (see column 7, lines 35-37);
- data in the source database is formatted according to the source extract format specification to produce a file with repetitive instances of the basic business object (formatted source data) (see column 5, lines 59-63);
- the database conversion engine receives the source data, the set of mapping instructions and the target schema specification (see figure 3);
- the database conversion engine parses the set of mapping instructions and the target schema specification (see figure 4);
- the database conversion engine performs the set of mapping instructions on the source data (see column 6, lines 6-11); and
- the database conversion engine uploads a resulting set of data into the target database in accordance with the target schema specification (see column 9, lines 27-30).

As to claim 12, Abrams teaches a computer system for migrating a source database to a target database (see abstract and column 1, lines 5-7) comprising:

- a mapping specification (see column 18, lines 42-44);
- a data filter (see column 2, lines 44-49);
- a source extract format specification (see column 1, lines 19-22);

- a target schema specification (see column 7, lines 25-26); and
- a generically coded database conversion engine wherein the database conversion engine is coded to perform conversions independent of the specific type of source database and the specific type of target database associated with a conversion (see column 1, lines 29-32; column 1, lines 39-45; column 5, lines 42-46; and column 17, lines 8-16);

wherein:

- the data filter formats the source data according to the source extract format specification (formatted source data) (see column 5, lines 59-63);
- the database conversion engine receives the formatted source data (see column 5, lines 33-38);
- the database conversion engine converts the formatted source data according to the mapping specification (converted data) (see column 1, lines 29-32);
- the database conversion engine formats the converted data in accordance with the target schema specification (target data) (see column 1, lines 29-32); and
- the database conversion engine uploads the target data into the target database (see column 9, lines 27-30).

As to claim 13, Abrams teaches a computerized method for migrating a source database to a target database (see abstract and column 1, lines 5-7) comprising:

- a delimited source file associated with the source database (see column 6, lines 6-11);

- a source extract format specification (see column 1, lines 19-22);
- a set of mapping instructions (see column 1, lines 29-32; column 4, lines 31-37; column 6, lines 6-11; and column 7, lines 35-37);
- an industry-specific mapping instructions template (see column 18, lines 42-44);
- a mapping language (see column 2, lines 33-36);
- a target schema specification (see column 7, lines 25-26); and
- a generically coded database conversion engine wherein the database conversion engine is coded to perform conversions independent of the specific type of source database and the specific type of target database associated with a conversion (see column 1, lines 29-32; column 1, lines 39-45; column 5, lines 42-46; and column 17, lines 8-16);

and further comprising the steps of:

- formatting the delimited source file according to the source extract format specification (formatted source data) (see column 5, lines 59-63);
- defining a set of requirements for the target database and encoding the requirements in the target schema specification (see column 1, lines 62-67);
- developing a set of mapping instructions, that define at least one translation instruction for the translation of the formatted source data from the source database to the target database, using the industry-specific mapping instruction template and further configuring the mapping instructions with commands developed with the mapping language via a graphical user interface (see column 7, lines 35-37 and column 18, lines 42-56);

- sending the formatted source data, the set of mapping instructions and the target schema specification to the database conversion engine (see column 1, lines 19-22; column 1, lines 29-32; column 4, lines 31-37; column 6, lines 6-11; column 7, lines 25-26; and column 7, lines 35-37);

- validating the formatted source data through a set of computer executable instructions encoded in the database conversion engine (see column 5, lines 30-38);

- parsing the set of mapping instructions (see column 1, lines 29-32; column 4, lines 31-37; column 6, lines 6-11; and column 7, lines 35-37);

- concurrently performing the set of mapping instructions on the formatted source data to produce a resulting set of data (see column 9, lines 27-30);

- validating the resulting set of data by comparing it to the target schema specification through a set of computer executable instructions encoded in the database conversion engine (see column 1, lines 62-67 and column 19, lines 8-12); and

- uploading the resulting set of data into the target database (see column 9, lines 27-30).

As to claim 14, Abrams teaches a computerized method for migrating a source database to a target database (see abstract and column 1, lines 5-7) further comprising the steps of:

- defining at least one basic business object for the migration by analyzing the source database and the target database (see column 5, lines 59-63 and column 8, lines 41-43);
- configuring the source extract format specification and the target schema specification according to the basic business object (see column 5, lines 59-63 and column 11, lines 46-56);
- formatting data in the source database according to the source extract format specification to produce a file with repetitive instances of the at least one basic business object (formatted source data) (see column 5, lines 59-63).

Response to Arguments

4. Applicant's arguments filed 20-September-2004 with respect to the rejected claims in view of the cited references have been fully considered but they are not found persuasive:

In response to applicants' arguments that Abrams "does not describe a database conversion engine coded to be database non-specific such that it may convert data from any type of source database to any type of target database", the arguments have been fully considered but are not deemed persuasive, Abrams teaches "The SQL code is used to map the data into the appropriate field in the destination database and to translate the data from the source format to the destination format", (see Abrams, column 1, lines 29-32).

“Appendix B is an extract of sample SQL code used to check for data dependencies prior to loading accounts receivable data. A typical company will have more than 100 of these SQL scripts to code and maintain to convert their data for just financial applications”, (see Abrams, column 1, lines 39-45).

“The primary function of this invention is to allow translation and transformation of data to convert from one system to another. The invention provides a format for entering the characteristics of the source data and the translation and transformation variables and the conditions of mapping the data so that the user does not have to know how to program. After the conditions are defined for each field in the source, the user creates templates to allow update to multiple source records simultaneously”, (see Abrams, column 17, lines 8-16).

Conclusion

5. Applicant’s amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2164

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Belix M. Ortiz whose telephone number is 571-272-4081. The examiner can normally be reached on moday-friday 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 571-272-4083. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

bmo

January 24, 2005



SAM RIMELL
PRIMARY EXAMINER